


Safety Data Sheet
Monoethanolamine, 99%

SECTION I - IDENTIFICATION

	DATE PREPARED: 12/13/1994
	REVISION DATE: 8/26/2004
	CHEMTEL: 800-255-3924
	PRODUCT CODE: MEA

ADDRESS: 2141 Palomar Airport Rd. Suite 125
Carlsbad, CA 92011

EMERGENCY PHONE NUMBER: (800) 255-3924

PRODUCT NAME: Monoethanolamine, 99%

CHEMICAL FAMILY:

CAS NUMBER: 141-43-5

SECTION II - HAZARDOUS IDENTIFICATION

GHS CLASSIFICATION:

Classification

Flammable Liquids	Category 4
Acute Toxicity, Oral	Category 4
Acute Toxicity, Dermal	Category 4
Skin Corrosion/Irritation	Category 1A, B, C
Serious Eye Damage/Eye Irritation	Category 1
Acute Toxicity, Inhalation	Category 4
Hazardous to the aquatic environment, acute hazard	Category 3
Hazardous to the aquatic environment, long-term hazard	Category 3

DANGER!

GHS LABEL:



Hazard Statements

H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

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Precautionary Statements

- P210 Keep away from heat/sparks/open flames/hot surface - No smoking.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated are.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+352 IF ON SKIN: Wash with soap and water.
- P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.
- P310 Immediately call a POISON CENTER or doctor/physician.
- P312 Call a POISON CENTER or a doctor/physician if you feel unwell.
- P322 Specific measures (see ð on this label).
- P330 Rinse mouth.
- P363 Wash contaminated clothing before reuse.
- P370+378 In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction.
- P391 Collect spillage.
- P403+235 Store in a well ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container to an approved waste disposal plant.

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

Component Name	CAS #	Component%	OSHA PEL	ACGIH TLV
Monoethanolamine	141-43-5	100%	3 ppm	3 ppm

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SECTION IV - FIRST AID MEASURES

- Contact with eyes:** Flush with water for 15 minutes. Seek immediate medical attention.
- Skin contact:** Wash exposed areas with water and mild soap. Remove contaminated clothing immediately and launder before reuse. If irritations persist, seek immediate medical attention.
- Inhalation:** Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Seek immediate medical attention.
- Ingestion:** If swallowed. Do not induce vomiting. Seek immediate medical attention.
Give large quantities of water. Never give anything by mouth to an unconscious person.
If vomiting occurs, keep head below hips to prevent aspiration into lungs.

SECTION V - FIREFIGHTING MEASURES

- Suitable Extinguishing Media:** Water fog, foam, CO₂, dry chemical.
- Special Fire Fighting Procedures** Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling.
- Unusual Fire Fighting Hazards:** Product is flammable and may be ignited by heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights or mechanical/electrical equipment). Vapors are heavier than air and may accumulate in low areas.

SECTION VI - ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Keep all sources of ignition and hot metal surfaces away from spill or release.
Evacuate all unprotected personnel from the area.
- Environmental Precautions:** Prevent liquid from entering drains, sewers or waterways.
Contain spill if it can be done with minimal risk.
Notify proper authorities.
- Methods for Cleaning Up:** Use foam on spills to minimize vapors.
Using only non-sparking tools and explosion proof equipment, collect spill on absorbent material and put into approved container.

SECTION VII - HANDLING AND STORAGE

- Handling and Storage:**
- "Empty" containers retain residue and/or vapor and may be dangerous. Do not cut, weld, braze solder, drill, grind or expose such containers to heat, flames, sparks, or other ignition sources.
 - Keep containers tightly closed when not in use.
 - Avoid prolonged breathing of mist or vapor. Wash thoroughly after handling.
 - NFPA Class III B storage.

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SECTION VIII - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component Name	CAS #	OSHA PEL	ACGIH TLV
Monoethanolamine	141-43-5	3 ppm	3 ppm

Engineering Controls: Adequate local or mechanical to reduce vapor or mist to below the PEL or TLV.

Monitoring: Follow accepted work practices for handling a flammable material.

Personal Protective Equipment (PPE)

Eye Protection: Goggles or approved OSHA device with side shields; do not wear contact lenses when handling this product.

Skin Protection: Impervious solvent resistant gloves.
Impervious apron and work boots recommend where splashing may occur.

Respiratory Protection: Use the proper respirator in areas where the chemical exposure is unknown or above the OSHA PEL or ACGIH TLV.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, Colorless to Pale Yellow Liquid
Odor	Strong Amine Odor
pH@25°C	11.8 (Neat Product)
Melting/Freezing Point	51°F
Boiling Point	339°F
Flashpoint	204°F, PMCC
Specific Gravity	1.02
Solubility	Complete
Auto-Ignition Temperature	-
Decomposition Temperature	-
VOC Content	Not Determined
Odor Threshold	-
Boiling Range	339°F
Evaporation Point	Not Determined
Flammable Limits - Upper	17%
Flammable Limits - Lower	5%
Vapor Pressure	0.2mmHg @ 20°C
Vapor Density (Air=1)	2.1 (Air=1)
Viscosity	-

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SECTION X - STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Acids.

Hazardous Decomposition/Byproducts:

Hazardous Polymerization: Will not occur.

Polymerization Conditions to Avoid: None

SECTION XI - TOXICOLOGICAL INFORMATION

Likely Route of Exposure: Contact and inhalation; ingestion possible.

Inhalation: May cause irritation to the upper respiratory tract and CNS depression. Chronic overexposure may result in irritation or tissue damage and an increased susceptibility to respiratory illness, and permanent lung damage.

Eye Contact: Causes eye irritation including stinging, watering and redness which may result in corneal injury.
Will cause severe burns on contact and will damage the eyes.

Skin Contact: Contact may cause mild skin irritation including redness, burning and drying/cracking of the skin.
No harmful effects from skin adsorption are expected.
Solid or liquid contact can cause severe burns and deep ulcerations.

Ingestion: Aspiration hazard. Can enter the lungs during swallowing or vomiting and cause chemical pneumonia and edema.
Can cause sever burns and complete tissue damage.
Low degree of toxicity by ingestion.

Toxicity:

Component Name	LD50	LC50
Monoethanolamine	Oral - Rat - 1,720 mg/kg; Dermal - Rabbit - 1,015 mg/kg	Not Established

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

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SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicity: Information not available.

Mobility: Information not available.

Degradability: Information not available.

BioAccumulation: Information not available.

SECTION XIII - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert. Can be disposed of by controlled incineration. Excessive quantities should not be permitted to enter drains, sewers, or water courses. Empty containers should be air dried before disposing.

SECTION XIV - TRANSPORT INFORMATION

DOT SHIPPING INFORMATION

Proper Shipping Name: Ethanolamine

Contains:

Hazard Class and Label: 8

Identification Number: UN 2491

Packaging Group: III

Label Required:

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:..... The components of this product are listed on the TSCA Inventory

SARA TITLE III SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE:

No chemicals in this material are subject to the reporting requirements.

SARA TITLE III SECTION 311/312 HAZARD CATEGORIZATION:

Acute	Chronic	Fire	Pressure	Reactive
X	X	X		

SARA TITLE III SECTION 313 SUPPLIER INFORMATION:

No chemicals in this material are subject to the reporting requirements.

CERCLA SECTION 102(a) HAZARDOUS SUBSTANCE:

No chemicals in this material are subject to the reporting requirements.

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SECTION XVI - OTHER INFORMATION

HMIS Health: 2

HMIS Flammability: 3

HMIS Reactivity: 0

Additional:

Specification Information

Department issuing data sheet: Compliance

Email address: Compliance@transcheminc.com

Training necessary: Follow all local, state and federal regulations

Intended Use of Product:

Seller and manufacturer disclaim any implied or expressed warranties, including warranties of merchantability or fitness of this product for any particular purpose. In no event shall seller be liable for any claim for incidental or consequential damages arising out of or in connection with the sale, delivery, transportation or use of this product. Seller's and manufacturer's liability in all events is limited to, and shall not exceed the purchase price paid for this product.